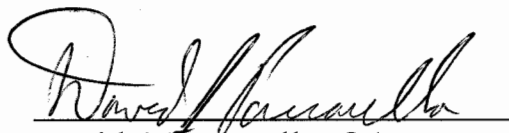


Collider-Accelerator Department


FY 2004 Self-Assessment Report

Prepared by:



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6/17/05
Date

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I. Collider-Accelerator (C-A) Department Mission

In support of Brookhaven National Laboratory's broad mission of providing excellent science and advanced technology in a safe, environmentally responsible manner the Collider Accelerator Department is committed to the following:

- ❖ Excellence in environmental responsibility and safety in all C-A Department operations.
- ❖ Develop, improve, and operate the suite of proton/heavy ion accelerators used to carry out the program of accelerator-based experiments at BNL.
- ❖ Support the experimental program including design, construction, and operation of the beam transports to the experiments and partial support of detector and research needs of the experiments.
- ❖ Design and construct new accelerator facilities in support of the BNL and National Missions.

II. Self-Assessment Program

The objective of the C-A self-assessment program is to provide a systematic approach to performance management. That is, to provide C-A management with information needed to ensure organizational performance objectives are being met and appropriate improvement actions are identified and implemented.

Supporting information for the objectives of Critical Outcome 1.0, Basic Science & Technology, are reported in the BNL Integrated Information Management System. This system provides the data required for the preparation of BNL Appendix B Self Evaluation Reports.

C-A Self-Assessment supporting documentation; e.g., [Program and Facility](#), [Organization](#), [ESHQ Division](#), [Assessment and Inspection Programs](#), [C-A Environmental Management Program](#), [C-A Occupational Safety and Health \(OSH\) Management System](#), [Authorization Basis Documents](#), [Operations and Procedures Manual](#), [Conduct of Operations Agreement](#), [Training Programs and Associated Records](#) and [Tier 1 Safety Inspections](#), are maintained on the Collider-Accelerator web site.

The C-A Department has adopted a self-assessment framework primarily based on the Malcolm Baldrige National Quality Award Criteria, which are as follows:

- Leadership Commitment and Involvement
- Human Resource Development and Management
- Customer Focus and Satisfaction (Customer Value)
- Process Management
- Business and Operational Results
- Compliance with Laws Regulations and Contractual Requirements

1. Evaluation of Objectives and Measures

For each of the assessment criteria stated above, C-AD has established objectives and performance measures where appropriate. The attached matrix lists those objectives, specific performance measures, and the FY 2004 performance results. A brief summary of C-A performance items, which were not captured in the matrix, are listed below.

1.1. Occurrence Reports, Nonconformance Reports and Investigations

- Reportable occurrence trends are documented in the [C-A Performance Indicator](#) quarterly reports.
- Five Nonconformance Reports (NCR) were issued in FY04. Corrective actions were tracked to closure in the C-A Family Assessment Tracking System (ATS).
- As a result of four Radiological Awareness Reports (RAR), three Causal Investigations and one critique were performed. When required, recommended corrective/preventative actions were tracked to closure in the C-A Family ATS.
- Eighteen critiques were performed at the direction of C-A ESHQ management. All recommended actions were tracked to closure in the C-A Family ATS.

1.2. EMS, OSH and SA

The ISO 14001 registration audit was conducted June 7 through 11 of 2004. There were no findings for the C-A Department. ISO 14001 registration is maintained.

The OHSAS 18001 registration audit was conducted September 21 through 24 of 2004. There were no findings for the C-A Department. OHSAS 18001 registration was achieved.

The C-A Department Review of Occupational Safety and Health (OSH), Environmental (EMS) and Self-Assessment (SA) Management was convened on September 10, 2003. The meeting agenda including discussions on the following topics:

- Critical Outcomes and Objectives in the Contract
- Overview of C-AD Programs that Impact OSH and E management systems
- C-AD Objectives and Targets
- Compliance Audit Results
- Performance Versus Contract Measures
- External and Internal Assessment of Performance
- Review of FY03 Record of Decision and Performance
- Injury/illness Performance
- Stakeholder Concerns
- OSH and EMS Related Facility Improvements
- Injury/illness and Pollution Prevention Initiatives
- Tier 1 and Self Evaluation Programs
- Environmental Performance
- Groundwater Contamination
- Waste Management
- Financial Investments
- Evaluation by Senior Management

Recommended items resulting from the Management Review were documented in the 2004 Management Review Record of Decision. The C-A Family ATS will be used to document the status of each recommendation.

1.3. Assessments

The C-A Department conducted the annual Department Self-Assessment, annual EMS Assessment and OSH Assessment, annual Environmental Management Review, 24 worker and supervisor self-evaluations, 23 QA assessments, 39 Tier 1 inspections, 52 90-Day Area inspections and 144 inspections of satellite-waste stations. Action items resulting from these internal assessments/reviews are tracked to closure in the C-A Family ATS.

The overall conclusions of these audits were: well written program descriptions, excellent operational procedures, well written and descriptive plans and forms, an excellent commitment by staff and users to the laboratory's policies and an excellent system for control of operations.

1.4. Open Action items from the FY 2004 Self-Assessment Program and C-A 2003 Environmental Management Review Record of Decision

The implementation of the following open items from the C-A FY 2004 Self-Assessment Program and C-A 2003 Environmental Management Review Record of Decision will be included in the C-A FY 2005 Self-Assessment Program.

FY 2004 Self-Assessment Program

- a. (2335.1.5) OSH requirements for procured items Due to current workload and available manpower procedure has not been prepared. Process to be developed and implemented in FY 05.
- b. (2335.2.3) Assess implementation of C-A OPM 9.4.2, C-A Self-Evaluation The assessment of C-A OPM 9.4.2, C-A Self-Evaluation, was re-schedule due to change in system owner. New due date is the second quarter of 2005
- c. (2335.4.8) Implement corrective actions in the report of the Electrical Ad Hoc Committee (Reference ATS 1425) [1425.1.15](#) - Implement the web based LOTO data entry/tag system Track 1425.1.15 in FY05 Self Assessment Plan
- d. (2335.6.8) Facilitate the submission of a P2 success story for the reduction of 2 MW power in ATR while RHIC is on store (assume off for 2/3/ of a day saves \$1600/day or 32 MW-hr/day) P2 submission still being evaluated. C-A may decide to submit in 2006
- e. (2335.6.17) Pursue High Return on Investment (ROI) P2 funding from DOE for installation of additional ozone water treatment system for RHIC STAR cooling tower. This item has not been funded Reschedule for 2005
- f. (2335.6.20) Perform planned upgrades to C-A water systems in accordance with ADS # 0007 and track progress This is an ongoing program that started some 3 years ago. There are many subtasks or efforts that pertain. This program is incrementally funded and will continue for at least 3 more years with any additions.

- g. (2335.6.29) Work with ERD to review and determine by ESD. A Focused Feasibility Study will be written by 2006. Long term monitoring and natural attenuation of the plume are to be expected
- h. (2335.6.33) Evaluate the potential for soil activation and rainwater infiltration to cause groundwater contamination greater than 5% of DWS at the Linac Beam Stops (4), Blip-Y, and AGS H-Areas. Develop plan for engineering controls, as needed. In summer of 2004, Blip-Y capped. Other areas are being evaluated and funding being requested.

C-A 2003 Environmental Management Review Record of Decision

- a. (1887.1.5) Place water-impermeable membranes over activated soil areas at the Linac. Caps at HEBT water stops and Linac to Booster Transition will be addressed in FY 2005.
- b. (1887.1.7) For the FY04 waste clean-up strategy, clean up the steel and other debris on Railroad Avenue, concentrate on cleaning up "Inner Mongolia," and begin to remove/replace PCB capacitors at Linac. The following is status of three items called out in ATS 1887.1.7.
 - Cleanup of steel at RHIC yard, Rail Yard, and 960 has been put out for bid by contractor recyclers. Crestwood had attempted to do this work but could not deliver a proper safety plan so work was put out for rebid.
 - Inner Mongolia cleanup has been delayed due to unavailability of Sealand containers to remove heavy rad. waste. A work plan and RWP are ready and this work should be completed in Nov. 04.
 - The first 1/3 of Linac PCB capacitors have been purchased this year. The largest capacitors are to be replaced first disposing of over 1/2 the PCB oil in inventory at Linac. Also bldg. 912 power supply replacement capacitors have been purchased and 75% of all power supplies have been retrofitted. In 05 another 1/3 of Linac PCB caps will be purchased, and if possible replacement capacitors for 928 Siemens.
- c. (1887.1.10) There should be renewed emphasis on fire protection since it impacts safety and routine operations. For example, the aging fire-alarm system is a major concern. Because some fire protection upgrades have started but are proceeding slowly, the Department should encourage Plant Engineering to use an outside supplier to install the new fire alarm system components. Due to funding restraints, BNL is approaching these upgrades slowly. The C-A ESHQ Division will monitor upgrades of the fire protection system.

ASSESSMENT CRITERIA 1: Leadership Commitment and Involvement			
OBJECTIVE: Excellence in environmental responsibility and safety in all Department operations.			
APPROACH: ES&H <ul style="list-style-type: none"> a) Implement formal OSH Management system <ul style="list-style-type: none"> 1. An injury free workplace 2. Compliance with OSH requirements in SBMS 3. Workers consulted and encouraged to participate in OSH Management System 4. Improved performance of OSH Management System 5. OSH Management System is integrated with the EMS Management System 6. Closeout WOSH Committee issues in a timely manner consistent with issue's risk 7. Close out Tier 1 findings in a timely manner consistent with the finding's risk 8. Meet BNL requirements on closure of OSHA findings b) Conduct a management review to discuss significant EMS, OSH and Self Assessment issues to ensure the continuing suitability, adequacy and effectiveness of the three programs. c) Successfully undergo the ISO 14001 surveillance audit. d) Successfully undergo the ISO 18001 surveillance audit. 			
Measures	Indicators	Responsibility	Schedule/Due Date
Implement a formal OSH Management System for accelerators, experimental areas, offices and shops at C-A		Associate Chair for ESHQ	September 2004
Results: (2335.1.1) As reported in the C-A 2004 Management Review, an OSH Management System has been implemented through the C-A complex.			
Action Items: None			
Measure 3.4.4.2 - OSHA Reportable Injury Management (Revised) For the second half of FY 04, April 1 through September 30, 2004 the Lost Workday Case Rate (LWCR) [or Days Away, Restricted, or Transferred (DART) rate = .50		Associate Chair for ESHQ	Quarterly (Performance Indicator)
Results: (2335.1.2) Rate was > 0.05 for this period, reset target for FY 05 (this was also reported in the 2004 C-A Management Review)			
Action Items: None			
Reduce number of first aid cases by 10% from FY03 number.		Associate Chair for ESHQ	September 2004

<u>Results:</u> (2335.1.3) As reported in the C-A 2004 Management Review, > 10% reduction occurred. <u>Action Items:</u> None		
Minimize findings in QA Assessments of OSH topics	Associate Chair for ESHQ	September 2004
<u>Results:</u> (2335.1.4) As reported in the C-A 2004 Management Review, there was a reduction in findings. Only 2 minor nonconformances were reported. (4 reported in 03) <u>Action Items:</u> None		
Define OSH requirements for procured items	Associate Chair for ESHQ	September 2004
<u>Results:</u> (2335.1.5) Due to current work load and available manpower procedure has not been prepared. <u>Action Items:</u> Process to be developed and implemented in FY 05. FY 05 Self Assessment Program will track this action to closure		
Coach F&O Directorate in their roll-out of 18001 type OSH Management System	Associate Chair for ESHQ	September 2004
<u>Results:</u> (2335.1.6) As reported in the C-A 2004 Management Review, C-A worked with F&O Directorate to develop their OSH program. <u>Action Items:</u> None		
Complete 15 Job Safety Risk Analyses (JRA) for the C-AD JRA Bank.	Associate Chair for ESHQ	September 2004
<u>Results:</u> (2335.1.7) As of 9/23/04, C-A has completed 25 JRA's <u>Action Items:</u> None		
Get Tier 1 Committee trained on OSHA regulations	Tier 1 Manager	September 2004
<u>Results:</u> (2335.1.8) 3 Tier 1 members have been trained, one of the 3 has been trained to be a trainer. Training of remaining Tier 1 committee members to be completed in FY 05. FY 05 Self Assessment Program will track this action item to closure. <u>Action Items:</u> None		
Close out WOSH issues within 90 days, track in family ATS	Tier 1 manager	September 2004

<u>Results:</u> (2335.1.9) Individual within C-A ESHQ Division has been assigned the responsibility of entering all WOSH action items into C-A Family ATS. <u>Action Items:</u> None		
Close out Tier 1 issues within designated times, track in family ATS	Tier 1 Manager	September 2004
<u>Results:</u> (2335.1.10) Individual within C-A ESHQ Division has been assigned the responsibility of entering all Tier 1 action items into C-A Family ATS. C-A ESHQ Division Head reviews closeout data. <u>Action Items:</u> None		
Meet BNL deadlines for handling OSHA findings	QA	On going
<u>Results:</u> (2335.1.11) As of Sept 2004, 63% of the OSHA action items have been closed. C-A QA to do field inspection to determine if any reported open items have been closed. <u>Action Items:</u> None		
Implement corrective actions in the report of the Electrical Ad Hoc Committee, see ATS 1425	Associate Chair for ESHQ	September 2004
<u>Results:</u> (2335.1.12) The action items from the report of the Electrical Ad Hoc Committee will be tracked to closure in ATS 1425 <u>Action Items:</u> None		
Implement corrective actions in the report Improving the Quality of Tier 1 Reviews at C-A, see ATS 2015	Associate Chair for ESHQ	September 2004
<u>Results:</u> (2335.1.13) The action items from the report of the Improving the quality of Tier 1 reviews at C-A will be tracked to closure in ATS 2015 <u>Action Items:</u> None		
Implement corrective actions in the report Enhancing Electrical Work Practices at C-AD, see ATS 2016	Associate Chair for ESHQ	September 2004
<u>Results:</u> (2335.1.14) The action items from the report of the Enhancing Electrical Work Practices Committee at C-AD will be tracked to closure in ATS 2016 <u>Action Items:</u> None		
Complete the OSH Team task list	Associate Chair for ESHQ	September 2004
<u>Results:</u> (2335.1.15) OSH team task list is complete <u>Action Items:</u> None		

Establish a functioning WOSH Committee	Associate Chair for ESHQ	January 2004
<u>Results:</u> (2335.1.16) WOSH Committee was established in January of 2004 <u>Action Items:</u> None		
Management Review completed and “Record of Decision” issued.	EMS Representative	September 2004
<u>Results:</u> (2335.1.17) C-A Management Review held on 9/15/04, ROD reviewed and approved by senior management <u>Action Items:</u> None		
Maintain ISO 14001 Registration ISO 14001 surveillance audit performed by third party, ISO 14001 registration maintained.	Associate Chair for ESHQ	June 2004
<u>Results:</u> (2335.1.18) ISO 14001 surveillance was performed in July 2004, registration maintained <u>Action Items:</u> None		
Measure 3.4.4.1 – Safety Improvement Path Forward (Revised) OHSAS 18001 surveillance audit performed by third party. Registration obtained.	Associate Chair for ESHQ	September 2004
<u>Results:</u> (2335.1.19) Audit performed and registration recommended on 9-24-04. No additional Objective Evidence provided <u>Action Items:</u> None		

ASSESSMENT CRITERIA 2: Human Resource Development and Management		
OBJECTIVE: 1 Create a pool of talented, empowered, motivated, and goal oriented leaders/managers/workers to support and enhance the C-A competitive position within the DOE laboratory complex. 2 Provide a high quality work environment that enhances C-A's ability to retain and attract an excellent workforce. 3 Maintain staff training > 95% complete		
APPROACH: 1 Training is promoted via the C-A Training Plan as described in OPM 1.12, Conduct of Training Policy (Training Plan). 2 The overall training strategy is found in two documents: a) Training Plan Agreement (http://www.rhichome.bnl.gov/AGS/Accel/SND/Training/trainplan.pdf) b) Training Plan (http://www.rhichome.bnl.gov/AGS/Accel/SND/OPM/Ch01/01-12.PDF) 4. Environmental training, which is process specific, may be found at: Process Specific Training (http://www.rhichome.bnl.gov/AGS/Accel/SND/process_specific_ems_training.htm) 5. OSH training, which is area specific, may be found at Facility Specific OSH Training (http://www.agsrhichome.bnl.gov/AGS/Accel/SND/facility_specific_osh_training.htm) 6. Via C-A OPM 9.4.2, Self Evaluations, a self-critical attitude is fostered throughout the department from workers to senior management; this provides the basis for correcting weaknesses as well as promoting best practices. A self-assessment database for action required/completed is maintained by the C-A ES&H/Q Division. 7. Perform periodic assessments to determine adequacy and effectiveness of listed strategies to achieve objective.		
Measures	Responsibility	Schedule/Due Date
Assess implementation of C-A OPM 9.4.2, C-A Self-Evaluation	QA	September 2004
Results: (2335.2.3) The assessment of C-A OPM 9.4.2, C-A Self-Evaluation, was re-schedule due to change in system own. New due date is the second quarter of 2005. Action Items: FY 05 Self Assessment Program will track this action item to closure		
Increase employee awareness of safety through participation in multiple (~4) safety awareness activities; e.g. show the film remember Charlie	ESHQ Division Head	September 2004
Results: (2335.2.4) As reported in the C-A 2004 Management Review, numerous safety awareness programs have being presented to C-A personnel by the C-A ESHQ Division. Action Items: None		









<p>Training and Qualification (T&Q) Performance</p> <p>Permanent Employees</p> <ol style="list-style-type: none"> 1. % of C-A staff linked to job specific training assessments. 2. % of T&Q requirements completed by C-A staff (Outstanding rating is = 95%) <p>Transient Staff</p> <ol style="list-style-type: none"> 1. % of staff linked to job specific training assessments. 2. % of T&Q requirements completed by staff (outstanding rating is = 80%) 	Training Manager	September 2004
<p><u>Results:</u></p> <p>Management & Operations SAM –</p> <p>Training and Qualifications Training and Qualification (T&Q) Performance</p> <p>(2335.2.1) Permanent Employees Both items continues to be maintained at or above the outstanding rating of 95%.</p> <p>(2335.2.2) Transient Staff Both items continue to be maintained at or above the outstanding rating of 80%</p> <p><u>Action Items:</u></p> <p>None</p>		

<i>ASSESSMENT CRITERIA 3: Customer Focus and Satisfaction (Customer Value)</i>		
<i>OBJECTIVE:</i> Operate the C-A facility in a manner that is responsive to C-A internal and external customer expectations.		
<i>APPROACH:</i> 1. Stakeholders inquiries related to the operation of the C-A are recorded in the BNL Correspondence and Commitment Tracking System maintained by the Collider-Accelerator Department. 2. Support BNL's initiative regarding the BNL Communication and Trust objective. 3. The AGS/RHIC Users Committee is a committee that represents the user community in various matters, such as programmatic satisfaction and dissatisfaction, quality of life matters, etc. They communicate both verbally and in writing to the directorate as well as line managers. 4. During operations, the weekly Time Meetings allow experimenters to discuss status, identify scheduling priorities, identify user requirements for the up coming week, voice complaints and at the same time, provide easy immediate access to all the C-A resources and staff. 5. Perform periodic assessments to determine adequacy and effectiveness of listed strategies to achieve objective.		
Measures	Responsibility	Schedule/Due Date
Review current interface process between the AGS/RHIC Users Center and the C-A Training Office. Determine if there are any opportunities for improvement.	C-A Training Manager	September 2004
<u>Results:</u> (2335.3.1) There is continual communication and cooperation between the RHIC/AGS Users' Center and the C-AD Training Office. Phone and e-mail communication is continuous, especially during periods of higher influx of Users. User training requirements, training schedules and the Guest registration process are established and communicated between the two organizations. As there is continuous communication between the AGS/RHIC User Center and the C-A Training Office new ideas on how to improve the existing processes are discussed <u>Action Items:</u> None		

ASSESSMENT CRITERIA 4: Process Management		
OBJECTIVE: Establish, maintain and improve C-A processes/procedures for implementing Laboratory and organizational expectations.		
APPROACH: 1 Implement the requirements of BNL SBMS Subject Area Work Planning and Control for Experiments and Operation. C-A OPM 9.2.1, Procedure For Reviewing Environmental, Health and Safety Aspects Of An Experiment ensures C-A complies with BNL requirements for the planning and control of experiments. C-A OPM 2.28, C-A Procedure For Enhanced Work Planning (which includes Stop Work policy) ensures C-A complies with BNL requirements for work planning and control systems as defined in BNL SBMS Subject Area Work Planning and Control for Experiments and Operations. Assessment of the implementation of the C-A work planning process is performed. All EWP systems within C-A shall be reviewed at a frequency specified by the C-A Work Control Manager. 2 Implementation of the BNL ES&H programs, including the EMS, OSH and Conduct of Operations is verified via scheduled inspections, audits and C-A management, independent and self-assessments. These programs are documented in OPM Chapter 9 procedures (e.g. Tier I and Self-Evaluations), C-A OPM 13.10.1, Independent Assessments and applicable subject areas. Reports are documented and include a description of the findings, corrective action(s), and identification of responsible individual(s). 3 Periodically assess C-A performance for implementation of Laboratory SBMS and internal process. The scope and frequency of assessment areas is based on <ul style="list-style-type: none"> Importance, status, risk, and complexity of the activity, item or process; Problems encountered with the activity, or item; Scheduling of specific activities; Availability of qualified personnel; A review of findings reported in previous assessments. This objective supports those assessments performed in compliance objective. Assessment to be performed in accordance with the "Environmental Assessment" Subject Area and C-A OPM 13.10.1, Independent Assessment.		
Measures	Responsibility	Schedule/Due Date
Perform assessment on the C-A implementation of the BNL Management System - Emergency Preparedness and Off-Normal Event Reporting <ul style="list-style-type: none"> Fire Safety 	Q Group	Annual 3 rd quarter
Results: (2335.4.1) Assessment completed, report issued to R. Costa on 6/30/04. Action Items: None		
Perform assessment on the C-A implementation of the BNL Management System - Environmental Management <ul style="list-style-type: none"> Regulatory Compliance EMS Assessments Management Review 	Q Group	Annual 3 rd quarter

<u>Results:</u> (2335.4.2) Assessment performed on 4/23/04 by BNL trained EMS auditors. <u>Action Items:</u> None		
Perform assessment on the C-A implementation of the BNL Management System - Life Cycle Asset Management <ul style="list-style-type: none"> • Maintenance Management • Energy Management Awareness 	Q Group	3 rd quarter
<u>Results:</u> (2335.4.3) Assessment completed, report issued to R. Costa on 6/30/04. <u>Action Items:</u> None		
Perform assessment on the C-A implementation of the BNL Management System – Records Management <ul style="list-style-type: none"> • Level 2 Managers Self-assessment of Records management System Maintenance Management 	Q Group	3 rd quarter
<u>Results:</u> (2335.4.4) Assessment completed, report issued to M. Peterson on 3/16/04. <u>Action Items:</u> None		
Perform assessment on the C-A implementation of the BNL Management System – Safeguards and Security <ul style="list-style-type: none"> • Foreign Visits and Assignments 	Q Group	3 rd quarter
<u>Results:</u> (2335.4.5) Assessment completed, report issued to R. Costa on 6/30/04. <u>Action Items:</u> None		
Perform assessment on the C-A implementation of the BNL Management System – Work Planning and Control <ul style="list-style-type: none"> • Compare Department–level Work Planning and Control (WP&C) procedures to Work Planning and Control for Experiments and Operations Subject Area to ensure consistency and compliance. • Evaluate feedback received on FY04 Work permits 	Q Group	3 rd quarter
<u>Results:</u> (2335.4.6) Assessment completed, report issued to S. Hoey on 6/30/04. <u>Action Items:</u> None		
Perform assessment on the C-A implementation of the BNL Management System -Worker Safety and Health <ul style="list-style-type: none"> • Department ESH Inspections (Tier 1s) • OSHA Roll-Up/Chemical Management • Occupational Injury Management • Lockout/Tagout 	Q Group	3 rd quarter
<u>Results:</u> (2335.4.7) Assessment completed, report issued to S. Hoey on 6/30/04. <u>Action Items:</u> None		

Implement corrective actions in the report of the Electrical Ad Hoc Committee (Reference ATS 1425)	ESHQ Division head	September 2004
<p><u>Results:</u> (2335.4.8) The action items from the report of the Electrical Ad Hoc Committee will be tracked to closure in ATS 1425.1 1425.1 - Committee Recommendations</p> <ul style="list-style-type: none"> • 1425.1.1 - Memorandum style training records (<i>Closed</i>) • 1425.1.2 - Use of the term 'authorized' (<i>Closed</i>) • 1425.1.3 - Revise OPM 2.13 (<i>Closed</i>) • 1425.1.4 - Retrain staff in implementing OPM 2.13 (<i>Closed</i>) • 1425.1.5 - LOTO logbook retraining during C-A Access Train (<i>Closed</i>) • 1425.1.6 - Disposition of LOTO tags and stubs (<i>Closed</i>) • 1425.1.7 - Update elect distribution one-line drawings (<i>Open</i>) • 1425.1.8 - Develop Web based LOTO data entry/tag system (<i>Closed</i>) • 1425.1.9 - Revision of procedures in Chapter 2 of OPM (<i>Closed</i>) • 1425.1.10 - Review hazards associated with test meters (<i>Closed</i>) • 1425.1.11 - Prepare an Orange tag procedure (<i>Closed</i>) • 1425.1.12 - Prepare procedure for disconnected cable tag (<i>Closed</i>) • 1425.1.13 - Prepare C-AD Grounding Plan (<i>Closed</i>) • 1425.1.14 - OPM 2.6 series to be reviewed/made concise (<i>Closed</i>) • 1425.1.15 - Implement the web based LOTO data entry/tag system (<i>Open</i>) <p><u>Action Items:</u> Track 1425.1.15 in FY05 Self Assessment Plan</p>		
Review and implement appropriate corrective actions recommended by Office of Independent Oversight during an Electrical Safety Review at C-AD	ESHQ Division Head	September 2004

<u>Results:</u> (2335.4.9) The action items from the report of the Electrical Ad Hoc Committee have been tracked to closure in ATS 1425.2  1425.2 - Office Ind Oversight corrective actions <i>(Closed)</i>  1425.2.1 - Plan to address unknown loads <i>(Closed)</i>  1425.2.2 - revise OPM 2.14 - describe committee responsibilities <i>(Closed)</i>  1425.2.3 - Link TQ-OJT1 to instructor JTA's <i>(Closed)</i>  1425.2.4 - Review RMA at Linac <i>(Closed)</i>  1425.2.5 - Ensure individual's JTA has appropriate link <i>(Closed)</i>  1425.2.6 - Use of grounding sticks <i>(Closed)</i>  1425.2.7 - Observation of LOTO & electrical safety practices <i>(Closed)</i> <u>Action Items:</u> None		
Perform annual management review of hazardous toxic material hazards	Associate Chair for ESHQ	September 2004
<u>Results:</u> (2335.4.10) An annual management review of hazardous toxic material hazards was presented by various individuals during the C-A FY 04 Management Review. <u>Action Items:</u> None		
Ensure the NSRL facility is designed and constructed to meet OSH requirements	ESHQ Division Head	June 1, 2004
<u>Results:</u> (2335.4.11) Review completed, January 2004. <u>Action Items:</u> None		
Review the PHENIX, PHOBOS, STAR, PP2PP and BRAHMS experiments at RHIC for conventional safety issues	ESHQ Division Head	June 1, 2004
<u>Results:</u> (2335.4.12) Reviews completed in September 2004. <u>Action Items:</u> None		
Review the NSRL experiments for conventional safety issues None	ESHQ Division Head	June 1, 2004
<u>Results:</u> (2335.4.13) Reviews completed in September 2004 <u>Action Items:</u> None		
Complete the work plans for NSRL, RHIC and AGS experiments	ESHQ Division Head	June 1, 2004

Results:

(2335.4.14) Work plans completed in September 2004

Action Items:

None

ASSESSMENT CRITERIA 5: Business and Operational Results		
OBJECTIVE: 1 Design and construct new accelerator facilities in support of the BNL and national missions. 2 Operational <ul style="list-style-type: none"> a) Operate and improve the suite of proton/heavy ion accelerators and beam transports used to carry out the program of accelerator-based experiments at BNL thus supporting the research mission of the laboratory's user population. b) Support the experimental program including design, construction, and operation of the beam transports to the experiments plus partial support of detector and research needs of the experiments. 		
APPROACH: 1 Report construction and operational progress/status to senior management at a frequency established by department/project management. 2 Operational: <ul style="list-style-type: none"> a) The C-A mission is defined in Field Work Proposals (FWP), Conceptual Design Reports and Project Management Plans. b) Changes and upgrades to the accelerators are described in the Accelerator Improvement Projects. 		
Measures	Responsibility	Schedule/Due Date
Critical Outcome 1.0 Basic Science & Technology: Objective 1.3 Success in Constructing and Operating Research Facilities <ul style="list-style-type: none"> 1. C-A Operations per FY04 Schedule and the accelerator performance meets the operational goals as specified in the FY 2004 Field Work Proposal. 2. Meet critical milestones of the Spallation Neutron Source (SNS) as defined in SNS Project Plan. 	<ul style="list-style-type: none"> 1. Associate Chair, Accelerators 2. SNS Project Manager 	September 2004
Results: (2335.5.1) As reported in the BNL FY Year End Self-Evaluation Report, the C-A research facility operated as scheduled and significantly exceeded minimum integrated luminosity performance goals (2335.5.2) As reported in the BNL FY Year End Self-Evaluation Report, the BNL part of the SNS Project at ORNL continued to meet all construction milestones at or below estimated costs Action Items: None		

ASSESSMENT CRITERIA 6: Compliance with Laws Regulations and Contractual Requirements		
OBJECTIVE: Maintain compliance with applicable BNL regulations and contractual expectations.		
APPROACH 1 Compliance requirements are communicated to C-A staff through participation on Laboratory committees, Laboratory Work Groups and through the SBMS. Senior C-A Electrical Engineers and senior C-A staff participate on the Laboratory Electrical Planning Committee, Laboratory Environmental, Health and Safety Committee, Radiation Protection Working Group, Environmental Management System Implementation Group, and Laboratory Electrical Safety Committee, all of which meet regularly. 2 In accordance with the BNL EMS, a regulatory compliance assessment, environmental management review, and EMS assessment shall be performed annually. a) Ensuring compliance to applicable requirements is addressed via scheduled inspections, audits and C-A management, independent and self-assessments. These programs are documented in the C-A OPM, and applicable subject areas. Reports are documented and include a description of the findings, corrective action(s), and identification of responsible individual(s). A general index of C-A ESHQ programs can be found at http://server.rhichome.bnl.gov/SND/indexoftopics.htm . 3 Perform periodic assessments to determine adequacy and effectiveness of listed strategies to achieve objective.		
Measures	Responsibility	Schedule/Due Date
Implement all FY'03 corrective actions from the Storage and Transfer of Hazardous and Non-hazardous Materials SA assessment and maintain SA tank posting requirements	C-A ECR & Environmental Coordinator	July 2004
Results: (2335.6.1) Task has been performed Action Items: None		
Review all emission points for compliance, documentation, and forward any updates to the EWMSD Subject Matter Expert	C-A ECR	March 2004
Results: (2335.6.2) Task has been performed Action Items: None		
Facilitate and participate in applicable assessments Liquid Effluents, RCRA, & Document Control) and complete Compliance Assessment Cards in accordance with the Environmental Assessments SA	C-A ECR – Liquid Effluents RCRA C-A QA – Document Control	March 2004 September 2004 February 2004
Results: (2335.6.3) Task has been performed Action Items: None		
Maintain records and report progress against waste goals and, where appropriate, suggest P2 opportunities	C-A Environmental Coordinator	On Going

<u>Results:</u> (2335.6.4) This information is captured the C- A Performance Indicators (quarterly) and the Waste Management quarterly reports <u>Action Items:</u> None		
Review all experiments and routine operations, as a member of the ESRC and ASSRC, to recommend pollution prevention opportunities/alternate waste disposal paths	C-A ECR	Ongoing
<u>Results:</u> (2335.6.5) Task has been performed; the only experiments not reviewed are BRAHMS & PHOBOS. I don't expect any change to them this year <u>Action Items:</u> None		
Facilitate the submission of a P2 proposal for the NSRL digital camera	C-A ECR	September 2004
<u>Results:</u> (2335.6.6) Task has been performed <u>Action Items:</u> None		
Facilitate the submission of a P2 success story for the reduction of 2 MW power by tuning of the RHIC refrigeration system (save \$2400/day or 48 MW-hr/day)	C-A ECR	September 2004
<u>Results:</u> (2335.6.7) P2 submission submitted and described in 2004 C-A Environmental Management System Highlights <u>Action Items:</u> None		
Facilitate the submission of a P2 success story for the reduction of 2 MW power in ATR while RHIC is on store (assume off for 2/3/ of a day saves \$1600/day or 32 MW-hr/day)	C-A ECR	September 2004
<u>Results:</u> (2335.6.8) P2 submission still being evaluated. <u>Action Items:</u> C-A may decide to submit in 2006		
Distribute information on spill kits/materials and subject area requirements on spill clean up and reportability. Track and report on C-A Spill costs	C-A ECR	Semi-annually
<u>Results:</u> (2335.6.9) Task has been performed <u>Action Items:</u> None		
Submit ADS funding request for PCB's and track request through to the final disposition	ESHQ Division Head	June 2004
<u>Results:</u> (2335.6.10) This was submitted and is very low on the BNL ADS priority list that C-A will replace slowly with operating funds <u>Action Items:</u> None		

Prepare and submit quarterly reports that track non-routine waste amounts and costs for disposal	C-A Environmental Coordinator	Quarterly
<u>Results:</u> (2335.6.11) Done routinely, indicators from P. Cirnigliaro and quarterly waste management reports <u>Action Items:</u> None		
Track the number of unusual or off normal events associated with groundwater impacts in current operations	C-A ESHQ Division Head	On going
<u>Results:</u> (2335.6.12) There were no unusual or off normal events associated with groundwater in FY 04 <u>Action Items:</u> None		
Submit a Field Work Proposal to address the clean-up of legacy materials due to prior High Energy Physics operations.	C-A Associate Chair for ESHQ	February 2004
<u>Results:</u> (2335.6.13) FWP was submitted in January 2004 <u>Action Items:</u> None		
Prepare and submit an updated listing of Satellite Accumulation Areas	C-A Environmental Coordinator	September 2004
<u>Results:</u> (2335.6.14) This action will be tracked to closure in ATS 2335.6.27 <u>Action Items:</u> None		
Track and report the number of Satellite Accumulation Areas and Radioactive Accumulation Area noncompliance's	C-A Environmental Coordinator	Quarterly
<u>Results:</u> (2335.6.15) This action will be tracked to closure in ATS 2335.6.27 <u>Action Items:</u> None		
Prepare and submit the waste generation forecast for FY05 report progress against waste goals and, where appropriate, suggest P2 opportunities	C-A Environmental Coordinator	September 2004
<u>Results:</u> (2335.6.16) Waste generation forecast and suggested opportunities for FY05 P2 have been submitted <u>Action Items:</u> None		
Pursue High Return on Investment (ROI) P2 funding from DOE for installation of additional ozone water treatment system for RHIC STAR cooling tower.	ESHQ Division Head/ C-A Environmental Compliance Representative	Not funded

<u>Results:</u> (2335.6.17) As reported in the C-A Self Assessment plan, this item has not been funded <u>Action Items:</u> Reschedule for 2005		
Maintain records and report progress against waste goals and, where appropriate, suggest P2 opportunities	ESHQ Division Head/ C-A Environmental Coordinator	September 2004
<u>Results:</u> (2335.6.18) Routinely done. Records available at all times. WM puts out a quarterly report on allocations and amounts per quarter used. It is reviewed by C-A quarterly. P-2 opportunities are submitted yearly <u>Action Items:</u> None		
Proceed with connection of RHIC tower blow-down to storm water system and control blow-down to minimize local erosion	Water System Group Leader	In Progress
<u>Results:</u> (2335.6.19) C-A Water Group has rerouted the blow down line from Tower 7 to the monitored site at 8 o'clock. C-A ECR will discuss local erosion issue with C-A ESH&Q Division Head. The original blow down line went directly into the storm drain area in the middle of RHIC. The blow down was re-routed to pass through the water monitoring sight at 8:00 o'clock. This site also handles the tower blow down water from Star and Phenix as well. This work was completed last year by Gary Barnett, Plant Engineering. Objective Evidence on file with Gary Barnett from the BNL Plant Engineering division. <u>Action Items:</u> None		
Perform planned upgrades to C-A water systems in accordance with ADS # 0007 and track progress.	Water System Group Leader	In Progress
<u>Results:</u> (2335.6.20) This is an ongoing program that started some 3 years ago. There are many subtasks or efforts that pertain. This program is incrementally funded and will continue for at least 3 more years with any additions. <u>Action Items:</u> Included in the FY 05 Self Assessment Plan		
Ensure that operational procedures are in place to respond to spills and that the procedures are in accordance to applicable subject areas.	C-A ESHQ Division Head	September 2004
<u>Results:</u> (2335.6.21) Appropriate operational procedures are in place <u>Action Items:</u> None		
Set a goal of zero reportable spills and track performance and report performance via the EMS management review.	C-A ESHQ Division Head	September 2004
<u>Results:</u> (2335.6.22) Number of spills was reported in FY 04 Management Review. ROD for FY 04 has further actions related to spills <u>Action Items:</u> None		
Collection and analysis of tunnel air samples	C-A RCD Facility Representative/ECR	September 2004

<u>Results:</u> (2335.6.23) All Annual confirmatory air samples have been completed as per C-A OPM 9.5.12. Results are on file with the C-A Facility Support Representative. <u>Action Items:</u> None		
Annual reporting of air sampling results to EPA Region II	EWMSD Radiological Subject Matter Expert	September 2004
<u>Results:</u> (2335.6.24) Annual Confirmatory Airborne Radioactivity Survey was performed by Facilities Support (FS) Staff per C-A OPM 9.5.12 Procedure for Conducting Annual Confirmatory Air Samples <u>Action Items:</u> None		
Periodically measure all radionuclides that could contribute at least 10% of the potential effective dose equivalent for the effluent source.	C-A Radiation Control	September 2004
<u>Results:</u> (2335.6.25) Annual confirmatory air samples as per C-A OPM 9.5.12 have been completed for 2004. Results are on file with the C-A Facility Support Representative. <u>Action Items:</u> None		
Ensure that groundwater samples are collected and analyzed, documented and results are reported in a timely fashion back to C-A, results are reviewed to ensure that they meet expected trends.	C-A Environmental Compliance Representative and C-A ESHQ Division Head	On going
<u>Results:</u> (2335.6.26) FY04 samples showed that caps are effective and no unusual results <u>Action Items:</u> None		
Prepare and submit an updated listing of Satellite Accumulation Areas and communicate to Waste Management Division. Inspect and maintain any necessary records of Satellite Accumulation Areas.	C-A Environmental Coordinator	September 2004
<u>Results:</u> (2335.6.27) Monthly records in Environmental Coordinators office for rad areas, satellite area inspected monthly in AGS Hazard Waste Trailer at 928 <u>Action Items:</u> None		
Soil caps maintained and inspected as required.	ES&F Division	September 2004
<u>Results:</u> (2335.6.28) Cap inspections for the start of the RHIC run are complete <u>Action Items:</u> None		
Work with ERD to review and determine best method to deal with g-2 tritiated plume (EE/CA).	C-A ESHQ Division Head	September 2004

<u>Results:</u> (2335.6.29) Plume monitoring continues by ESD. A Focused Feasibility Study will be written by 2006. Long term monitoring and natural attenuation of the plume are to be expected <u>Action Items:</u> This action will be tracked to closure in the FY 05 Self Assessment Plan		
Verify transfer of FRDP issues as determined by SME report due by the end of first quarter	C-A ECR	September 2004
<u>Results:</u> (2335.6.30) Task has been performed <u>Action Items:</u> None		
Track the number legacy items disposed of and track the funding requests through to final disposition of the request	C-A Environmental Coordinator	Ongoing
<u>Results:</u> (2335.6.31) This is part of the Environmental Coordinators job function and is therefore an ongoing task <u>Action Items:</u> None		
Inspect, maintain and store orphaned materials in an appropriate area until disposition and funding is available for reuse or disposal	C-A Environmental Coordinator and FES Group Leader	August 2004
<u>Results:</u> (2335.6.32) Done routinely, outdoor storage areas inspected quarterly, indoor areas checked by HP monthly <u>Action Items:</u> None		
Evaluate the potential for soil activation and rainwater infiltration to cause groundwater contamination greater than 5% of DWS at the Linac Beam Stops (4), Blip-Y, and AGS H-Areas. Develop plan for engineering controls, as needed.	C-A ESHQ Division Head	July 2004
<u>Results:</u> (2335.6.33) In summer of 2004, Blip and Y capped. Other areas are being evaluated and funding being requested. <u>Action Items:</u> Track to closure in FY 2005 Self Assessment Plan		
Measure 3.4.3 Pollution Prevention Verify that C-A is actively involved in the BNL Pollution Prevention Program. i.e. by submitting at least two pollution prevention project proposals to the P2 Council and/or two success stories and/or lesson learned stories	Associate Chair for ESHQ and C-A Environmental Compliance Representative	September 2004
<u>Results:</u> (2335.6.34) This item was addressed in the C-A 2004 Management Review. P2 submissions made in July 2004 <u>Action Items:</u> None		